IN THE SPECIFICATION

Please amend the following paragraphs as follows:

[0001] The present application incorporates by reference the entire disclosure of (1) U.S. Application Serial No. 10/768,565 ~~10/768,571~~ entitled "Pressure Activated Safety Valve With ~~Anti-Adherent Coating~~ High Flow Slit" filed on January 29, 2004 naming Karla Weaver and Paul DiCarlo as inventors; (2) U.S. Application Serial No. 10/768,571 entitled "Pressure Activated Safety Valve With Anti-Adherent Coating" filed on January 29, 2004 naming Karla Weaver and Paul DiCarlo as inventors; (3) U.S. Application Serial No. 10/768,855 entitled "Pressure Actuated Safety Valve With Spiral Flow Membrane" filed on January 29, 2004 naming Karla Weaver and Paul DiCarlo as inventors; and (4) U.S. Application Serial No. 10/768,479 entitled "Dual Well Port Device" filed on January 29, 2004 naming Katie Daly, Kristian DiMatteo and Eric Houde as inventors.

[0008] FIG. 1 is a diagram showing a pressure activated safety valve in a closed configuration and in two opposite flow configurations;

[0019] A flow control membrane 32 may be disposed in the flow chamber 36 positioned to selectively impede the passage of fluid though flow chamber 36. The flow control membrane may, for example, be located adjacent the proximal end of the housing 30. One or more slits 34 are extended ~~extend~~ through the membrane 32 so that under predetermined conditions, the slit 34 opens. When the membrane 32 is not subject to the predetermined conditions, the slit 34 remains closed. For example, the flow control membrane 32 may be constructed so that the slit 34 opens when subject to a flow pressure of at least a predetermined threshold level, but remains securely closed when a flow pressure impinging thereon is less than this threshold level. This threshold valve opening pressure may correspond, for example, to pressures to which the valve would be subjected if an operating dialysis machine were connected thereto and will preferably be substantially greater than pressure to which the membrane 32 would be generated by the patient's vascular system or which would be induced in the housing 30 due to patient activity.

[0021] As shown in FIG. 1, the flow control membrane 32 is securely held in place within the housing 30, so that it will not be displaced by the force of the fluid flowing through the valve 20.

For example, the flow control membrane 32 may be placed on a membrane seat 50 of the housing 30. The membrane 32 may, for example, be sandwiched between separable portions of the housing 30, so that a membrane retention portion 52 of the housing 30 applies a compressive force to a periphery of flow control membrane 32 thereby maintaining it in a desired position within the housing. However, ~~iff~~ <u>if</u> too strong a retention force is applied to a small surface portion of the membrane 32, the membrane 32 may be deformed possibly resulting in puckering or other deformation thereof. This may prevent the slit 34 from closing completely resulting in an insufficient seal and the many disadvantages associated therewith.

[0023] Furthermore, propagation of the slit (or slits) may result as strain concentrates at ends thereof when a fluid flows through the valve 20, forcing the slit 34 to the open configuration. If the membrane 32 is too thin, edges of the membrane 32 that are retained by the housing may not completely immobilize the membrane 32. ~~Ths~~ <u>The</u> additional movement of the thin membrane 32 may cause further strains to be exerted on edges of the slit(s) 34, resulting in propagation of the slit and possible failure of the valve 20. This may cause the slit 34 to grow to a size whereby the resilience of the material of the membrane 32 is no longer able to maintain the edges of the slit 34 in contact with one another when subject to pressures below the threshold level.

[0027] By selecting an appropriate thickness for the base membrane 104, the resulting stacked membrane will have a greater thickness at locations where the retaining compressive force are exerted by the valve housing 30 while the portion of the stacked membrane surrounding the slits 106 is thinner to allow for a greater flow rate. Exemplary ranges for the thickness <u>t1</u> ~~b1~~ and <u>t2</u> ~~b2~~ as shown in FIG. 2 may be 0.005-0.1 inches. In addition, the base membrane 104 may be tapered to direct the flow of fluid into the valve.

[0031] A top elevation view of the base membrane 104 is shown in FIG. 4. As described above, the base membrane 104 is designed to form a region of the stacked membrane 100 which has a local thickness greater than a thickness of the flow control membrane 102. In the exemplary embodiment shown, the base membrane 104 has an outer periphery <u>with</u> ~~that~~ dimensions that are substantially equal to the dimensions of the seating portion 108 of the flow control membrane 102. In this manner, the portion of stacked membrane 100 that is sandwiched between the retaining parts of the housing 30 is sufficiently thick to avoid the structural problems associated with thin membranes, as <u>described</u> ~~descried~~ above. In the exemplary embodiment, the base

membrane 104 overlies the seating portion 108, which in turn overlies the membrane seat 50 of the housing 30. In different embodiments, the dimensions of the base membrane 104 may be different from those of the seating portion 108. However, the extent to which the base membrane 104 extends radially within the seating portion 108 is preferably minimized to prevent the flow rate from being reduced due to the resulting increase in the force acting to bias the flow membrane 102 toward the closed position. Of course, those skilled in the art will understand that this dimension may be altered to achieve a desired threshold pressure as well.

Please amend the Abstract as follows:

A pressure activated valve for medical applications comprises a housing having a lumen extending therethrough from a proximal end to a distal end thereof and a flow control membrane extending across the lumen to control flow therethrough, the flow control membrane including a mounting portion at which the flow control membrane is coupled to the housing and a lumen occluding portion having a slit extending therethrough so that, when the lumen occluding portion is subjected to a pressure of at least a predetermined threshold level, the lumen occluding portion moves from a closed configuration in which flow through the lumen is prevented to an open configuration in which flow is permitted and wherein a thickness of the mounting portion is greater than a thickness of the lumen occluding portion. ~~A method of forming a membrane for a pressure activated valve, comprises the steps of forming a substantially planar flow control membrane dimensioned to fit in a housing of the pressure activated valve, wherein a mounting portion of the flow control membrane is adapted to engage the housing, and forming at least one slit in the flow control membrane, the slit being openable by pressure of a fluid in the pressure activated valve of at least a predetermined threshold level in combination with the steps of forming an annular base membrane dimensioned to substantially overlie the mounting portion of the flow control membrane and stacking the base membrane on the mounting portion of the flow control membrane.~~